
Classifying Curriculum Scholarship in Australia: A Review of Postgraduate Theses 1975-2005

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Abstract

This paper discusses an initial analysis of the form of Australian postgraduate scholarship over the last four decades in relation to curriculum inquiry. The study forms part of an ARC funded project on the shifts and emphases of Australian curriculum policy from 1975 to 2005 which seeks to contribute to understandings of how Australian curriculum has developed across states and over time. Analyses of changing emphases within education thesis production are hampered by the lack of systematic and consistent indexing of the theses, but within the criteria and methods we used, the thesis analysis elicited some tantalising findings. These seem to show a changing focus away from curriculum study in the most recent decade of Australian postgraduate theses, following three decades of rising interest in that area of education. But the study also demonstrated inherent methodological and practical problems for doing the inquiry itself, in terms of (1) the ways we categorise and think about education as a field; (2) limitations of the archiving and coding practices we have put in place to sustain a sense of our own history and the need to improve these; and, (3) potentially, research assessment now in train, and its intention to categorise work via "field of research" codes.

Introduction

Curriculum inquiry forms a significant part of the broader field of educational scholarship and is identified as a strong field of interest for both postgraduate education students and education academics. However, the term is ambiguous and there is no undisputed definition of what constitutes research within the field. Curriculum encompasses a broad spectrum of inquiry and is interpreted to mean different things by different people. This

article arises from an attempt to map developments in curriculum inquiry in terms of the research produced by postgraduate students. It discusses both the results of our study and the inherent problems associated with attempting to categorise a shifting field.

In general, studies focusing on curriculum research in Australia appear to have concentrated on findings and trends within the sub-field of curriculum, rather than analysing it in terms of its place within the broader educational research arena (for example Keeves, 1987; Keeves & Marjoribanks, 1999). According to Green (2003), reflexive scholarly accounts of curriculum inquiry have remained rare in Australia. This study offers a small contribution to this field. It considers some evidence regarding the quantum of scholarship produced on curriculum within the broader field of educational research and in relation to a broader reflection on curriculum as a field and as a category, and curriculum development in Australia.

The article is drawn from an ARC funded project entitled "School knowledge, working knowledge and the knowing subject: a review of state curriculum policies 1975-2005", which is attempting to build an initial overview of curriculum culture and emphases in each state at ten year intervals from 1975 to 2005. The study of thesis topics was intended to contribute to this aim of providing a basis for students, teachers and policy-makers to consider how curriculum has developed in Australia. The original aims of the project were to map the changing conceptions and values that can be seen in the different states across the period 1975 to 2005, taking soundings at ten year intervals of key policy documents in each state; and supplementing those with interviews with curriculum actors, and some parallel analyses of curriculum theses and journal articles over the same period. In particular, the project was interested in the changing constructions of knowledge, and of the academic and vocational purposes of schooling, and changing views of the learner and difference amongst learners over that time. More broadly, a focus of the project was an interest in how curriculum is made in Australia.

The current article discusses the work we did to review education theses from 1975 to 2005 in relation to the project. It discusses ways in which our attempt to undertake this work encountered similar conceptual and practical problems to those also encountered for the other parts of the project and what this says about the nature of curriculum as a field. We also show the results of the work we did within these limitations, and some interesting patterns of difference that can be seen by taking our birds' eye view.

The Field of Curriculum Inquiry

Curriculum and curriculum inquiry are ambiguous terms and the scope of the field is constantly shifting. In Australia, the term is mainly used in relation to the work of schooling, but it is not necessarily confined to what schools do. In 2005, for example,

the University of Melbourne set up a Curriculum Commission to undertake a major reform of its undergraduate education. The word curriculum may refer to overall policies through which a state (or a university or a vocational authority or the like) structures the content, structure and assessment practices of education programs. Or it might refer to specific subject syllabuses and frameworks, or to what is enacted in schools, both intended and unintended (in this enactment sense, it is less commonly used outside the school sector). Curriculum inquiry and scholarship are also concerned with conceptions of what should be encompassed within policies or school frameworks. Curriculum research includes conceptual studies and documentary analysis as well as empirical studies of unintended effects and practices as well as action research, and the like.

Yates (2005) has previously proposed the following definition of curriculum inquiry:

Curriculum questions . . . involve both big picture thinking, and attention to everyday pragmatics. Curriculum questions look at the substance of what school does; they go beyond just seeing schooling as a black box that produces scores and outcomes patterns. Curriculum asks us to think about what is being set up to be taught and learned, what is actually being taught, what is actually being learned, why agendas are taken up or not taken up, who benefits and loses, whose voice is heard and whose is silenced, what future is being formed for individuals and what future is being set in train for Australia as a whole. Curriculum is concerned with effectiveness, but also with expansiveness and voices, and who gets a say. (p. 3)

“Reconceptualist” curriculum inquiry takes curriculum even further, and seeks to decouple curriculum from schooling and local policy and practice agendas (Pinar, 2004; Green, 2003; Gough, 2007). Pinar argues that curriculum theory is essentially “the interdisciplinary study of educational experience” although “not every interdisciplinary study of educational experience is curriculum theory . . . ; nor is every instance of curriculum theory interdisciplinary” (p. 2). Not everyone agrees with either definition, of the scope of this field, and indeed there is an emerging and lively new debate about just what should be the scope and referent of curriculum inquiry (see Hamilton, 1999; Hopmann & Riquarts, 2000; Moore & Young, 2001; Wraga & Hlebowitsh, 2003). The project which gave rise to the current review of theses was specifically concerned with schooling in Australia, and with a conception of curriculum in line with Yates’ (2005) comments above. The decision to restrict curriculum inquiry to schooling-related work in what follows was based more on practical than theoretical concerns. But the further decisions about the type of work to include that are discussed below reflect a particular understanding of what curriculum as distinct from all studies of education experience is concerned with.

The project from which the current enquiry derives was specifically tied to Australia and to an interest in what had changed over time. In the 1970s, spurred by “new sociology” and by popular writings from Paulo Freire, Ivan Illich, John Holt and many others, “big picture” conceptions of curriculum seemed to rise on the agenda, and the scope of curriculum was understood as comprising teaching, learning and assessment in the classroom and as a process in which particular knowledge was prioritised to promote specific social and cultural values and ideologies (Yates, 2009). By the 1990s, curriculum studies was seen by many to relate to narrow subject studies or method studies rather than broader questions relating to its relationship to culture and society (Yates, 2009). The point at which the project began was one when a National Curriculum was being mooted as a development by both political parties, and in which it seemed to be of some interest to get a better and more systematic sense of where we had been, rather than simply entering the rising partisan debates.

The field of curriculum inquiry or curriculum studies is relatively new in academia. In the mid-1960s, research into the problems of the school curriculum was barely recognised as a field of scholarship (Keeves, 1999). In 1987, Marsh observed that “the field of curriculum is very young in Australia, certainly no more than a decade” (p. 7). It was in the period between 1968 and 1980 that four major curriculum journals were established: “Journal of Curriculum Studies”; “Curriculum Inquiry”; “Curriculum Perspectives” and “Journal of Curriculum Theorizing” (Yates, 1987). In Australia, a curriculum field was seen to emerge over the 1970s, not just in universities, but in conferences and publications sponsored by teachers’ unions (for example VSTA, 1975). The Commonwealth Government established the Curriculum Development Centre in Canberra in 1974; and in 1979 a “Curriculum Interest Group” was formed which became the Australian Curriculum Studies Association in 1980. The Association produced both a newsletter, “Curriculum Concerns”, and a journal “Curriculum Perspectives”. Curriculum Perspectives was set up to facilitate discussion specifically in the Australian context, and the opening editorial, by the Editor Colin Marsh, described the journal as a “tangible demonstration that curriculum-making has become recognised as a serious concern by many people in Australia, including teachers, advisory specialists, administrators and academics” (Marsh, 1980, p. 1). Although discussion of curriculum had of course existed previously, these developments were marking out this area in a new way, as a recognised field of inquiry.

Since its emergence in the 1970s and 1980s, the field of curriculum scholarship has developed into a significant field within educational research. In 1994, 35 percent of Australian Association for Research in Education (AARE) members listed curriculum studies as a research interest; and previously, in 1971, 15 percent listed curriculum development, research and evaluation, content analysis and 17 percent listed subject teaching area study as an interest (Bessant & Holbrook, 1995). Bessant and Holbrook’s

(1995) analysis of papers presented at AARE conferences from 1979 to 1994 indicates approximately 13.4 percent of a total of 1084 papers related to curriculum, a figure only topped by the 34.5 percent categorised as relating to psychology.

Postgraduate Study in Australia

Curriculum inquiry has benefited greatly from the contributions of postgraduate researchers. According to Holbrook et al. (2000), postgraduate students comprise the largest single group of people involved in educational research within this country. Holbrook and Findlay (2002) also found that over the 1990s, the most substantial growth of person/years dedicated to educational research occurred in relation to postgraduate students, which increased 4.3 times over the period. Over the past four decades, postgraduate educational scholarship has increased significantly, in line with broader trends in postgraduate education and the importance of this contribution has been noted in a number of studies (for example Bourke & Holbrook, 2002; Holbrook et al., 2000; Lingard & Blackmore, 1997). The number of postgraduates and the size of their contribution to the field make their work of significant interest when reviewing curriculum research in Australia.

Postgraduate education students in Australia differ from many other postgraduate students in that they are primarily part-time and often work in the education sector as teachers and administrators. They are also often significantly older than their counterparts in other disciplines and Doctoral students are more likely to have previously completed a Masters degree. Most educational researchers are in a second career, having first trained and practised in another role in the education sector, most often as teachers. Bourke and Holbrook (2002) found that in a study of 1267 postgraduate education students, 1130 were from the education sector and of those a total of 671 students worked primarily at the school level. In terms of subject matter, postgraduate students in education determine the subject and methodology of their theses by individual choice largely based upon interest and personal belief about the value of the work (Holbrook et al., 2000).

However, despite the numbers of postgraduate theses produced each year and listed online by the Australian Council for Educational Research (ACER), it is likely that relatively few education theses receive wider dissemination (though this may be changing as outputs of doctoral study are organised and audited by governments as part of a research training agenda, and as universities seek to maximise their publication points for funding purposes). In 1992, the review of research by McGaw, Boud, Poole, Warry and McKenzie claimed that there appeared to be little expectation for postgraduate students in education to publish from their research in comparison to other fields. However, Bourke and Holbrook (2002) argue that as many postgraduates are part-time students working within

the education profession, many would be involved in disseminating and diffusing research, both formally and informally, either during or following their postgraduate work. Postgraduates provide a significant linkage between university research and the implementation of research findings in schools and school systems and are well placed to be the sources of new ideas and developments. This could especially be true in relation to curriculum. In Bourke and Holbrook's study it was found that of the 671 students working at the school level whilst studying, 31 percent (the highest recorded) reported developments in curriculum when asked about the types of new developments they had experienced in the past year and research was the most frequently cited basis for new developments in schools.

Other Studies of Educational Research and the Problems of Categorising Research

Over recent years, increasing interest in the impact of educational research has emerged in Australia, particularly in regard to research quality, and two major reviews of education research have preceded the forms of research quality assessment now in train. The Australian Research Council sponsored report "Educational Research in Australia" (McGaw et al., 1992) argued that while excellent work was being accomplished in Australian educational research, further support was required to ensure this research would be able to effectively contribute to improving educational practice in Australia. A later Department of Education, Training and Youth Affairs (DETYA) report "The Impact of Educational Research" (DETYA, 2000), comprised a collection of studies which offered further insights into the educational research impact in Australia and examined the relationship between university-based research and the activities related to school education. One contribution "Mapping educational research and its impact on Australian schools" (Holbrook et al., 2000) reviewed the totality of educational total research activity, and explored the outcomes of research from previously unexamined perspectives, including postgraduate research.

As part of their broad analysis of education research in Australia, both McGaw et al.'s (1992) report and Holbrook et al.'s (2000) study reviewed education theses from the ACER "Education Research Theses" (ERT) database, the former from 1980 to 1989 and the latter in selected years from 1984 to 1997 in terms of quantity, method and subject. Both studies used bibliometrics to code the theses, a research method which uses quantitative analysis to evaluate research output and impact within or between fields and disciplines. To categorise theses according to subjects, McGaw et al. (1992) used the "Australian Education Index" (AEI) "broad subject categories" and Holbrook et al. (2000) used both these and the AEI main "subject descriptor groups". The two types of classifications were differentiated as follows. At the time of the studies, each article/thesis in the AEI and ERT

was assigned one broad subject category which was primarily used to determine where the article was placed within the organisation of the index's annual and quarterly printed editions. Of the 28 categories, four related to curriculum: (1) Curriculum, (2) Curriculum Subjects Basic, (3) Curriculum Subjects Vocational And Professional and (4) Curriculum Subjects Traditional Disciplines. In addition, all articles/theses were allocated descriptors or keywords (on average 5, usually ranging between 4 and 7) which capture the main features of the content (Holbrook & Findlay, 2002). All the education descriptors are grouped into nine main subject descriptor groups. At the time of Holbrook et al.'s (2000) study these were titled Learning and Development, Physical and Mental Conditions, Educational Processes and Structures, Curriculum Areas, Human Society, Politics and Economics, Information and Communications and Research and Facilities and Equipment. The group names have been slightly amended since but remain structured in the same format (see Gifford, 2003).

The methodology used by these reports is no longer viable. Although the descriptors and subject descriptor groups are still used, the broad subject categories are no longer seen as valid and the ACER Cunningham Library ceased assigning this categorisation to papers at the end of June 2008. As previously mentioned, the broad subject categories were originally used to structure the printed versions of the index. As only one code could be assigned and for many items the decision was not clear cut, the categories often presented a significant challenge to indexers. The number of indexers completing the task also meant that consistent categorisation was very unlikely. With the last printed edition of the AEI published in 2000, the field became less relevant and as it was seen as a reasonably crude bibliometric tool that did not fit with changing database systems and standards, it was removed. As Holbrook et al. (2000) acknowledge in their report, "The broad subject categories do not provide the most powerful or robust analysis of the contents of the AEI" (p. 70). Further analysis by Holbrook and Findlay (2002) used the broad subject categories and selected descriptors to analyse research activity relating to the foundation disciplines of history, philosophy, sociology and psychology. Their research noted that while the broad subject categories were able to pick up the majority of theses for the disciplines of sociology and psychology, only about half were found for history through this method and the task proved even more difficult for philosophy.

Furthermore, the main descriptor subject groups present difficulties for determining themes relating to thesis content, as it is not clear from the name itself exactly to what they relate. This is particularly apparent in relation to curriculum. The main descriptor group Curriculum Areas relates only to specific school subject matters and does not include terms relating to curriculum organisation such as "curriculum", "curriculum development", "curriculum implementation" or "curriculum policy," all of which fall in this categorisation under the descriptor group Educational Processes and Structures

(Gifford, 2003). The Curriculum Areas group is therefore limited and does not encompass the broad spectrum of what we would see as forming part of the field of curriculum research. Although Holbrook et al. (2000) argue that the descriptors “are a more powerful and coherent framework for describing trends in educational research” than the broad subject categories (p. 78), it is still difficult to determine patterns when subjects are split across the broader groups.

Categorising research works such as postgraduate theses is recognised as a difficult task. As Bates (2003) argues, bibliometric analysis is imprecise as it is often based upon databases developed on principles that do not suit the purposes of the bibliometrical study. Studies by Macauley, Evans, Pearson, and Tregenza (2005; see also Macauley, Evans, & Pearson, 2009) have demonstrated that, in addition to problems regarding individual library classifications, coding theses based primarily on titles and abstracts is a complex and challenging process. Their 2009 study classified Australian PhD theses by the Australian Bureau of Statistics Research Fields, Courses and Disciplines (RFCDD) codes for the period 1987 to 2006. Codes were determined using a number of factors including thesis title, subject headings and call numbers, the faculty where the thesis was located, and abstracts. This task was carried out by a team of ten coders who were all provided with training and worked together to resolve classification issues. It was argued that where only author and title were available for PhD records coding was a “difficult and time-consuming task” (p. 193). Both these studies also coded the theses only to the RFCDD discipline level of which there are 139 categories. Categorising theses according to subject level would have created even further difficulties and unreliability as there are over 898 categories within the RFCDD subject level.

Our Study Methodology

In the current study, the criteria for categorisation of a thesis as related to curriculum was intended to reflect the conception of curriculum that framed the project as a whole, where the interest was in what was being designated as the content of the schooling or classroom experience: what was being set up for students to learn or to develop into in the course of their schooling. We elected not to use the AEI coding classifications, but developed our own set of quite broad criteria (discussed in the next paragraph) about what we would take as representing a curriculum thesis. Two members of the research team independently made these decisions, and a third looked at ones which had not been in agreement. The process involved working with limited evidence regarding each thesis (sometimes just title, but usually supplemented by abstract) and what we have is not a tight and precisely replicable coding, but we indicate here the way we proceeded and that there is some agreement with other limited forms of attempting to classify work done at particular times.

We began by developing lists of all education theses produced at interval periods which have been made available on the ERT. Given the large number of education theses produced over the period, we did not examine the data on an annual basis, but at five year intervals from 1975 to 2005. We then sought to refine the lists to incorporate only those theses concerned with curriculum in Australian schools. Given problems of defining curriculum, we began by focusing on topics we agreed were not about curriculum (in the sense described above), rather than defining characteristics of those that should be included. Thus we ruled out theses concerned with: tertiary education, early childhood (non-school) education, perspectives of beginning teachers, 19th and early 20th century histories of Australian education, studies of countries outside Australia, studies of cognitive functioning (unless these were clearly in the context of questions about school subjects or curriculum provision), student discipline and classroom teaching (unless it related to a particular subject), principals and professional development, in-service and pre-service teacher education (unless it was about the implementation of a specific curriculum or has a specific subject focus), stress management, teacher or student perceptions (unless it related to curriculum) and motivation (unless it was about gender and maths or something to that effect). In the first few cases, decisions about exclusion were relatively clear cut; but with theses related to teaching and learning, the issue was much more ambiguous. In these cases, if the title seemed to indicate some interest in the issue of what is being conveyed to students in schooling, they were included; while if they seemed to be primarily about effectiveness of particular pedagogies, or characteristics of particular students, they were excluded. Although the larger project for practical funding reasons was not undertaking subject-specific analyses, and was limiting the focus to exclude primary schooling; in the case of the thesis review, we did include both, since in principle they fall within the conception of curriculum the study is interested in.

The database search was conducted in late 2008 and the numbers of theses made available on the ERT has since altered slightly as more students have submitted their work for inclusion. For example between November 2008 when lists were examined, and the writing of this article in April 2009, thesis numbers increased from 472 to 484 theses for the year 2005. Nevertheless such changes are marginal given that this is less about exact numbers than an overview pattern.

The original aim of compiling the lists was to encapsulate changes of activity and interests in relation to curriculum, as well as debates and concerns about curriculum across states and over time. This following analysis also seeks to use the lists to discover where the interest in curriculum as a field of inquiry sits in relation to the broader field of educational research.

Curriculum Theses Data

Our searches of the ERT at each five year interval from 1975 to 2005 unearthed a total of 2926 education theses. From this, we identified 509 or a little over 17 percent as relating to curriculum. The following section discusses the data in terms of the numbers of curriculum theses across the period, their relative importance compared with other education theses and in terms of the level of postgraduate qualification. Our findings are represented in Table 1 below which illustrates the numbers of theses produced each year according to year and research level.

	Curriculum Theses		Other Education Theses			Total
	Doctorates	Masters	Doctorates	Masters	Other	
1975	2	13	10	42	0	67
1980	7	58	37	208	0	310
1985	7	62	66	275	3	413
1990	16	75	82	344	0	517
1995	35	136	106	401	0	678
2000	33	32	260	144	0	469
2005	18	15	324	115	0	472

Table 1: Numbers of curriculum and other education theses at five year intervals 1975-2005

The period of analysis saw a marked increase in both education and curriculum scholarship over the 1980s and 1990s. In 1975, only 67 education theses were completed which increased to a record number of 678 in 1995. Of this, only 15 curriculum theses were produced in 1975, increasing to 65 in 1980, 69 in 1985, 91 in 1990 and 171 in 1995. Across the five year intervals, 1995 saw the largest quantity of curriculum theses produced. That year, 35 Doctoral and 136 Masters curriculum theses were completed, encompassing approximately 25 percent of all completed education theses, which was the largest percentile recorded from the interval periods.

However, the subsequent two intervals recorded significant declines in the numbers of curriculum theses produced. In 2000, only 65 curriculum theses were completed, representing a 62 percent drop from the previous interval period. 2005 saw further decline of almost 50 percent with only 33 curriculum theses being completed that year. Apart from 1975, this was the lowest recorded number of curriculum theses produced at any of the intervals and was only a little over half the number produced in 1980.

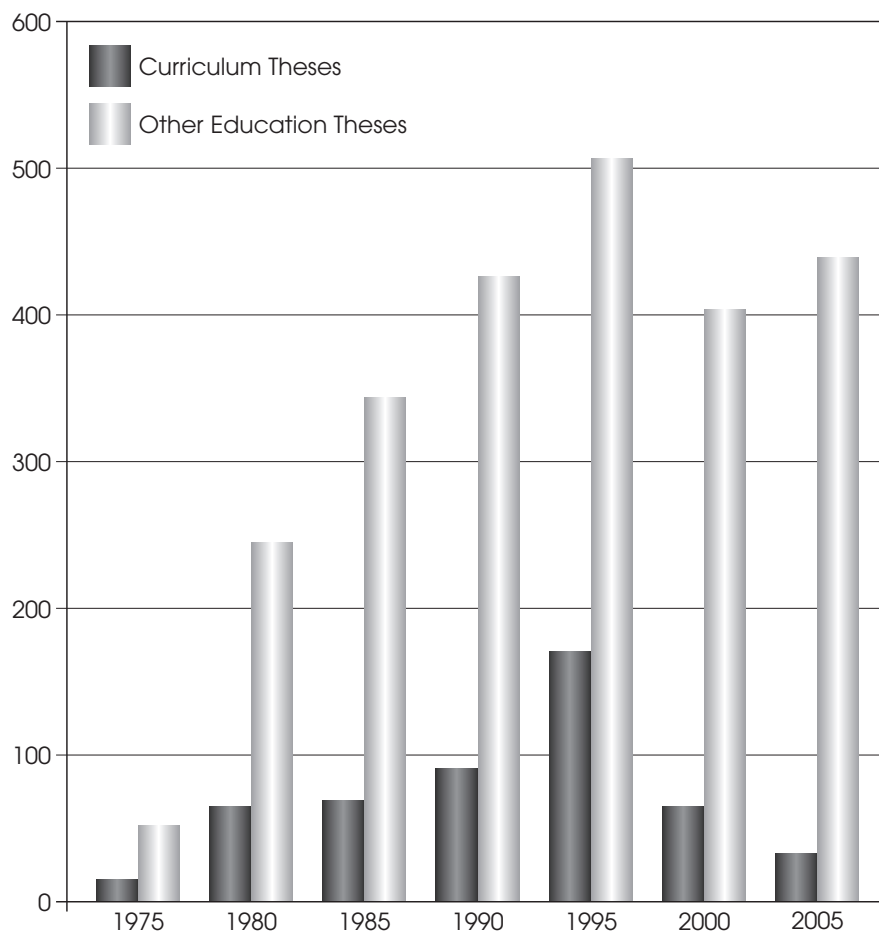


Figure 1: Numbers of curriculum and other education theses produced at five year intervals 1975-2005

The greatest decline was seen in respect of Masters theses. The declining figures from 1995 to 2000 were almost all Masters theses, with a difference of 104, compared with a drop of only two theses at Doctoral level. Holbrook et al. (2000) cite the move to full-fee paying Masters by coursework degrees as a probable reason for the decline in Masters students from 1998 to 1999. This is a likely factor and is also reflected amongst other education Masters theses which fell from 401 in 1995 to 144 in 2000. Lingard (2001) argues that governmental funding policies for universities which provide no funds for taught Masters degrees actively discourage teachers from taking higher degrees and so would have constituted a significant motivation behind this drop.

However, this does not explain the decline in Doctoral curriculum theses from 35 and 33 in 1995 and 2000 respectively to just 18 in 2005. Lingard and Blackmore (1997) argue that as most PhD students in education are more likely to have completed a Master's

degree than enrol following completion of an Honours degree, the move to full-fee coursework Master's degrees in education will be liable to have a significant impact on the numbers of potential PhD students in education. Yet while this appears to be the case in relation to curriculum based Doctorates, it has not been seen in the broader field of education. The decline in curriculum Doctoral scholarship is set against a marked increase in Doctoral theses on other education subject matters from 106 in 1995 to 260 in 2000 and 324 in 2005. Although the numbers of curriculum Doctoral theses completed in 2005 is still significantly higher than those produced in any of the intervals prior to 1990, curriculum Doctoral scholarship appears to be declining at the expense of other education Doctoral scholarship. In 2005, curriculum theses accounted for just over five percent of all education Doctoral theses. The number of Doctoral students has been increasing significantly over the last decade. Holbrook et al.'s (2000) study of postgraduate students found that there were almost twice as many Doctoral students as expected based on the proportion of students in the previous year (45 percent in 1999 compared with 22 percent in 1998).

Further, although the number of curriculum theses rose steadily over the intervals from 1975 to 1990, the second highest percentage of curriculum theses, approximately 22 percent was recorded in 1975 and the third highest, approximately 20 percent, was recorded in 1980, meaning that aside from the 1995 spike, the percentage of postgraduate theses relating to curriculum has actually been declining over the period of analysis in relative terms to other education theses. This has been particularly seen in relation to Doctoral theses, of which the percentage relating to curriculum is often lower than that of Masters. In 1985, only nine percent of Doctoral education theses completed related to curriculum compared with 18 percent of Masters theses.

Our Results Compared with Other Studies and Data

Our findings differ, but not to a major extent, from the data provided by Holbrook et al. (2000) and McGaw et al.'s (1992) studies. However, interestingly, it appears that our results are closer to Holbrook et al.'s broad subject categories data than is their own data on the main subject descriptor groups. Our categorisation determined that 21 percent of education theses produced in 1980 related to curriculum, 17 percent related to curriculum in 1985, 18 percent in 1990, 25 percent in 1995 and 14 percent in 2000. In comparison, Holbrook et al. reported that, based on the broad subject categories, curriculum theses accounted for 26 percent of education theses in 1984, 18 percent in 1989, 24 percent in 1992 and 19 percent in 1997, but found that the frequency of descriptors in the curriculum main subject descriptor group showed little variance and fluctuated between 14.6 and 17.5 during those years. This demonstrates the differences between the two indexing classifications and the potential unreliability of using them to determine research trends.

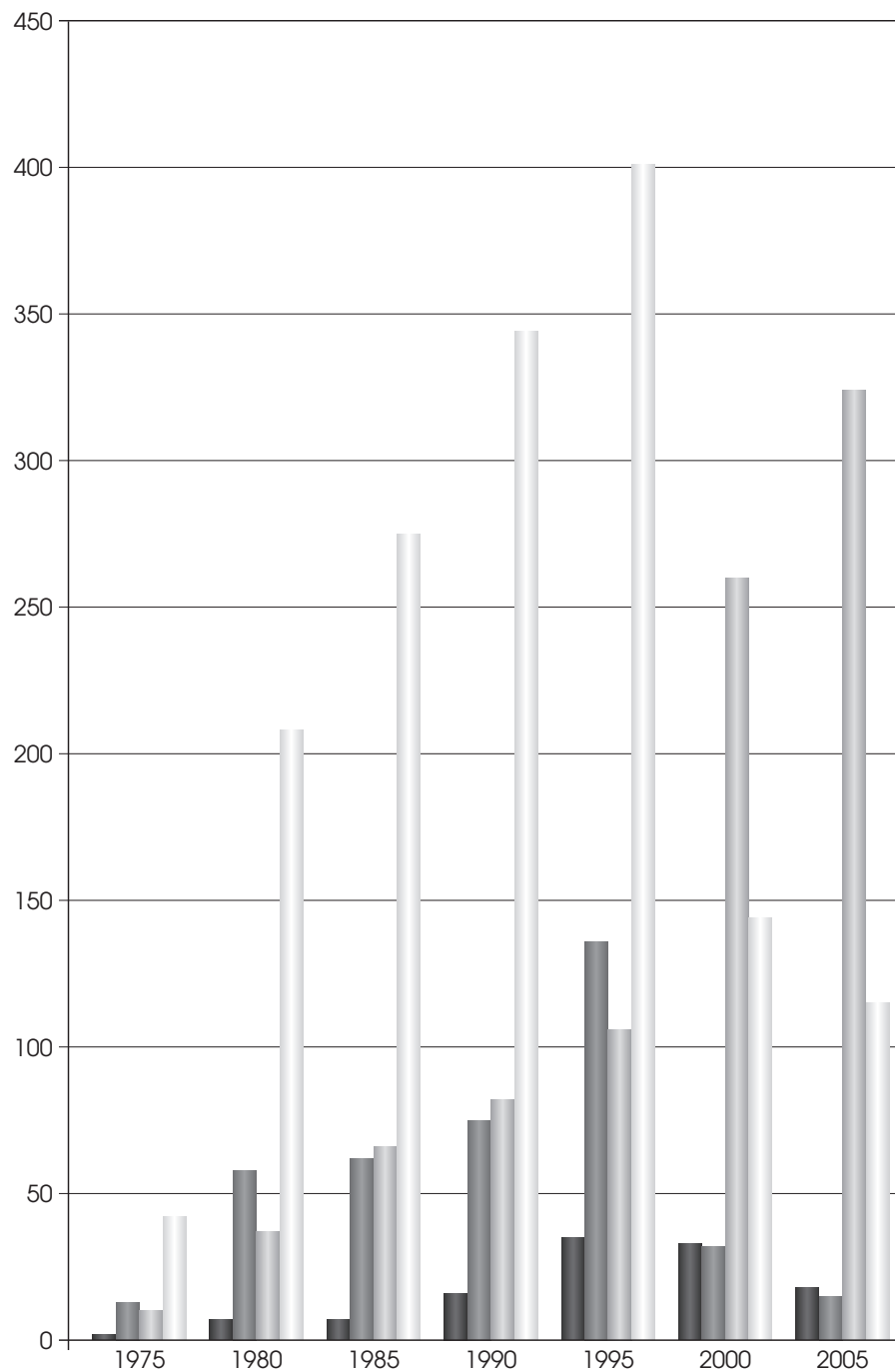


Figure 2: Numbers of curriculum and other education masters and doctoral theses produced at five year intervals 1975-2005

A review of the ERT subject descriptor data for 2005 could not adequately identify which areas the education theses shifted towards in the apparent move away from curriculum inquiry and further illustrated the difficulties of using the terms as a method of determining content patterns. Analysis of the subject descriptors indexed against the theses we categorised as curriculum illustrated an increase in the percentage of descriptors relating to Educational Processes and Structures (48.4 percent compared with 39.4 percent for all education theses) and Curriculum Areas (20.7 percent compared with 16.3 percent) and decreases in the percentage of descriptors relating to Physical and Mental Conditions (1.9 percent), Human Society (4.2 percent) and Social/Economic Enterprise (4.2 percent). However, there was no indication of patterns amongst the descriptors that correlated with our interpretation of a curriculum thesis. Six of our curriculum theses were indexed against the descriptor “curriculum development” but fourteen other theses with this descriptor were not interpreted by our methodology to encompass curriculum. This was also the case with theses indexed as “curriculum implementation”, four of which were interpreted as curriculum, two of which were not. Moreover, of the total twelve theses indexed with the descriptor “curriculum”, only two were interpreted as curriculum theses by our study. This demonstrates the problems of using the descriptors to make judgements relating to shifts and patterns in theses subjects. While the descriptors and main descriptor groups are valuable tools for searching the database, they are not necessarily appropriate for the purpose of exploring research output themes, particularly in regards to terms with multiple meanings and inferences.

Descriptor Groups	All Theses	Curriculum Theses
Learning and Development	11.7	10.8
Physical and Mental Conditions	5.8	1.9
Educational Process and Structures	39.4	48.4
Curriculum Areas	16.3	20.7
Human Society	11.8	7.0
Social/Economic Enterprise	7.0	4.2
Information and Communications	3.7	3.3
Research and Measurement	3.5	2.8
Facilities and Equipment	0.6	0.5

Table 2: Percentage frequency of main subject descriptor groups for ERT in 2005

Bourke and Holbrook’s (2002) study of postgraduate education students found that school based respondents were most likely to mention curriculum and educational processes and structures when asked to indicate areas of study in their present

degree. Their study found that the postgraduates involved in school level education indicated an interest in curriculum areas at almost double the rate of how publications had been indexed in the AEI in the same period. The results of Bourke and Holbrook's study do not correlate with our finding that the numbers of curriculum-based education research theses are diminishing. The differences between their study and ours further point to the difficulties in categorising curriculum. School based postgraduate researchers may be more likely to view their work and study as relating to curriculum than curriculum/education academics, since curriculum forms such a strong part of school-based researchers' day-to-day work. However, it could also illustrate the differences in interests between school-based researchers and other education postgraduate students.

The differences between postgraduate perceptions of their area of study and external classifications of their final work can also be seen in Holbrook et al.'s report (2000). Their analysis of surveys from a sample of postgraduate students in 1999 found that curriculum continued to dominate postgraduate education scholarship and Masters and Doctoral theses were predominantly about educational processes and structures and issues in curriculum, particularly in terms of English, mathematics, science and languages other than English. In their study, 31 percent of the sample of postgraduate students listed curriculum areas as their study area, whereas the researcher coding had designated only 19 percent of theses categorised as curriculum by the broad subject categories and 15.6 percent categorised by the descriptor groups in 1992 to 1997. This points to the ambiguity of the definition/s of curriculum inquiry, and also illustrates a difference in interpretation between coding categories and postgraduate student opinions of their own research.

In terms of our study, the discrepancy between our findings of decline in postgraduate curriculum scholarship and the high levels of postgraduate interest in curriculum reported in these studies could potentially be explained by the fact that our categorisation deliberately excluded studies of pedagogical effectiveness within a given curriculum or studies that did not seem to be engaging normatively with the content of the school experience. However, our criteria were not intended to be narrow ones, and included most theses that designated a particular school subject interest.

Conclusion

This article offers an account of the amount of curriculum scholarship that has been produced by postgraduate study between 1975 and 2005. The analysis shows the conceptual and practical difficulty of having even a relatively rough overview of the kinds of research that has been carried out by postgraduate students. Using our criteria, our results indicated a strong and building interest in curriculum topics up to the past

decade, and then some decline. As we showed, the meaning of this is unclear, given the limited comparisons we can make with other attempts to review the thesis outputs. But it may possibly be a sign of a landscape that is no longer seeing curriculum (in broad terms, the shape of what is to be taught) as primarily the subject of research from below. Although other studies have demonstrated that postgraduate students continue to report an interest in curriculum, the difference may well relate to the stronger emphasis we have put on the normative and our knowledge or skills directions in our attempt to differentiate curriculum inquiry from teaching, learning, effectiveness and the like.

We have attempted to offer both an interpretation of the patterns in curriculum postgraduate research output and a discussion of the problems associated with undertaking such a task. While we acknowledge the ambiguity of the task associated with our categorisation of curriculum theses and acknowledge that definitions of curriculum within the literature are not in tight agreement, we have at least tied our own categorisation to an explanation of the conception under-pinning it, so that we can have some sense of the meaning we impute to the results. By comparison, we believe the coding categories of the ABS type are either (mis)taken as transparently “operationalisable”, or used as descriptors that may be applied for a range of different purposes, and have even more limited value as ways of classifying and understanding the field. We do not see our findings as definitive, but as a starting point which could be used to review further changes or kinds of interests across states and over time.

An interesting sideline to this whole discussion is that curriculum is one of the very few categories acknowledged to be indigenous to education as a field of study. In the emerging ERA (Excellence in Research in Australia) research assessment in Australia, education researchers have been concerned about the effects of an Australian Bureau of Statistics re-categorisation of fields of research that insists sociology of education be seen as a sub-set of sociology rather than as part of education research; educational psychology as derived from psychology, and the like. Curriculum inquiry potentially draws on research and theories about societies, cultures and people but in the context of normative and nationally and historically situated topics. But the issue of whether a field is best delineated by its subject-matter or by its framing assumptions, methodologies and programs of research is no more resolved by the current ABS field of research classifications (which tend towards the latter) than the previous RFCD codes (which primarily chose the former). Whichever are chosen, it is clear that education researchers – and indexers – do not categorise research consistently or in single ways, and we need to understand this to analyse what has been produced. But it is a potential problem in current policy contexts which have signalled a wish to cluster postgraduate researchers where there is evident research strength. Understanding that a sociology researcher may equally be a curriculum researcher or the converse is important to this intention, but not normally assisted by the mechanical compiling of metrics.

A final concern raised by this project is the very limited and rough form of Australian archiving that exists of past research and documents in education, especially by state departments and libraries. ACER (with AEI and its ERT) and AARE (with its searchable conference papers and RAREs) have both made a significant contribution to preserving and some indexing of research, and that is important for the work of future researchers. But as technology develops with new inputs for searchable indexes and archives, we need to give attention to finding means to do this that better reflect education research and curriculum inquiry as fields of endeavour.

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References

- Bates, R. (2003). Phelan’s bibliometric analysis of the impact of Australian educational research. *Australian Educational Researcher*, 30(2), 57–64.
- Bessant, B., & Holbrook, A. (1995). *Reflections on Educational Research in Australia: A history of the Australian Association for Research in Education*. Coldstream, Australia: Australian Association for Research in Education.
- Bourke, S., & Holbrook, A. (2002). Links between research and schools: The role of postgraduate students. *Australian Educational Researcher*, 29(2), 15–32.
- Department of Education, Training and Youth Affairs (DETYA). (2000). *The impact of education research*. Canberra: Research Evaluation Program, Higher Education Division.
- Gifford, A. (Ed.). (2003). *Australian thesaurus of education descriptors*. Camberwell, Vic.: Australian Council for Educational Research.
- Gough, N. (2007). Changing planes: Rhizosemiotic play in transnational curriculum inquiry. *Studies in Philosophy of Education*, 26, 279–294.
- Green, B. (2003). Curriculum inquiry in Australia: Towards a local genealogy of the curriculum field. In W. Pinar (Ed.), *International handbook of curriculum research* (pp. 123–142). London: Lawrence Erlbaum Associates Publishers.

-
- Hamilton, D. (1999). The pedagogical paradox (or Why no didactics in England?). *Pedagogy, Culture & Society*, 7(1), 135-152.
- Holbrook, A., Ainley, J., Bourke, S., Owen, J., McKenzie, P., Misson, S. et al. (2000). Mapping Educational Research and its Impact on Australian Schools. In DETYA (Ed.), *The Impact of Educational Research* (pp. 15-278). Canberra: Research Evaluation Program, Higher Education Division.
- Holbrook, A., & Findlay, M. (2002). The disciplines in Australian education: Their share of the research output 1984–1998. *Change: Transformations in Education*, 5(1), 106-123.
- Hopmann, S., & Riquarts, K. (2000). Starting a dialogue: A beginning conversation between Didaktik and the curriculum traditions. In I. Westbury, S. Hopmann, & K. Riquarts (Eds.), *Teaching as a Reflective Practice: The German Didaktik Tradition* (pp. 3-11). Mahwah, NJ: Lawrence Erlbaum.
- Keeves, J. (1987). *Australian education: Review of recent research*. Sydney: Academy of Social Sciences in Australia, Allen & Unwin.
- Keeves, J. (1999). Research into curriculum change. In J. Keeves & K. Marjoribanks (Eds.), *Australian Education: Review of Research 1965-1998* (pp. 113-144). Camberwell, Vic.: Australian Council for Educational Research.
- Keeves, J., & Marjoribanks, K. (1999). *Australian education: Review of research 1965-1998*. Camberwell, Vic.: Australian Council for Educational Research.
- Lingard, B. (2001). Some lessons for educational researchers: Repositioning research in education and education in research. *Australian Educational Researcher*, 28(3), 1-46.
- Lingard, B., & Blackmore, J. (1997). The “performative” state and the state of educational research. *Australian Educational Researcher*, 24(3), 1-22.
- Macauley, P., Evans, T., & Pearson, M. (2009). *Classifying Australian PhD theses by research fields, courses and disciplines*. Report on a Study for the Research Excellence Branch, Australian Research Council, December 2008 (Revised April 2009). Retrieved May 7, 2009, from <http://prodmams.rmit.edu.au/qjcu4phay2ia.pdf>
- Macauley, P., Evans, T., Pearson M., & Tregenza, K. (2005). Using digital data and bibliometric analysis for researching doctoral education. *Higher Education Research and Development*, 24(2), 189-199.
- Marsh, C. (1980). Editorial. *Curriculum Perspectives*, 1(1), 1.
- Marsh, C. (1987). Curriculum theorizing in Australia. *The Journal of Curriculum Theorizing*, 7(2), 7-29.
- McGaw, B., Boud, D., Poole, M., Warry, R., & McKenzie, P. (1992). *Educational Research in Australia*. Canberra: AGPS.
- Moore, R., & Young, M. F. D. (2001). Knowledge and the curriculum in the sociology of education: Towards a reconceptualisation. *British Journal of Sociology of Education*, 22(4), 445-461.

-
- Pinar, W. (2004). *What is Curriculum Theory?* Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Victorian Secondary Teachers Association (VSTA) (1975). *Secondary Curriculum*. North Richmond: Victorian Secondary Teachers Association.
- Wraga, W., & Hlebowitsh, P. (2003). Toward a renaissance in curriculum theory and development in the USA. *Journal of Curriculum Studies*, 35(4), 425-437.
- Yates, L. (1987). *Curriculum theory and non-sexist education: A discussion of curriculum theory, feminist theory and Victorian education policy and practice 1975-1985*. Unpublished PhD thesis, La Trobe University School of Education.
- Yates, L. (2005). *What can schools do? Knowledge, social identities and the changing world*. Inaugural Professorial Lecture. Melbourne University Faculty of Education Dean's Lecture Series 2005. Retrieved 19 May, 2009, from www.eduweb.vic.gov.au/edulibrary/public/publ/research/publ/Yates_What_can_schools_do.doc
- Yates, L. (2009). From curriculum to pedagogy and back again: Knowledge, the person and the changing world. *Pedagogy, Culture and Society*, 17(1), 17-28.